AMENDMENT TO THE DRAWINGS

The attached replacement sheet makes changes to Fig. 7 and replaces the original sheet

with Fig. 7.

Attachment: Replacement Sheet

REMARKS/ARGUMENTS

Claims 1-18 are pending in the present application. Claims 1, 8, 9, and 18 are independent. Claims 1, 8, 9, 13, 14, 17, and 18 are amended.

ABSTRACT

In section 2 on page 2, the Office Action includes a section reminding Applicant of the proper content of an Abstract. Applicant thanks the Examiner for this reminder and amends the Abstract to bring the language and format into compliance. Applicant respectfully submits that the abstract complies with all applicable requirements.

DRAWINGS

In sections 3 and 4 on page 3, the Office Action objects to Figure 7 for the specified reason. Figure 7 is corrected as requested by the Office Action. Applicant submits herewith a replacement sheet adding reference characters to all steps in Figure 7. In addition, as required by the Examiner, Applicant submits herewith an annotated drawing figure indicating the changes made to Figure 7. See 37 C.F.R. § 1.121(d)(2).

Applicant also notes that, with reference to Figure 7, paragraph [0063] is amended to make reference to the reference characters added to Figure 7, as required. For at least the foregoing reasons, Applicant respectfully requests that the objection to the drawings be withdrawn.

REJECTION UNDER 35 U.S.C. § 112

In section 6 on page 4, the Office Action rejects claim 13 under 35 U.S.C § 112, 2nd paragraph, as being allegedly indefinite for the specified reason. Applicant respectfully traverses this rejection for at least the following reasons.

Claim 13 is amended in an attempt to clarify the recitation alleged to be unclear by the Office Action. Applicant respectfully submits that claim 13, as amended, complies with the requirements of 35 U.S.C. § 112, 2nd paragraph. Therefore, Applicant respectfully requests that the rejection of claim 13 under 35 U.S.C. § 112 be withdrawn.

ALLOWABLE SUBJECT MATTER

In sections 14 and 15 on page 11, the Office Action indicates that claims 14 and 17 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant hereby amends claim 9 to incorporate the allowable subject matter from claim 14 and amends claim 14 to delete the corresponding subject matter added to claim 9. In addition, Applicant amends claim 18 to incorporate the allowable subject matter previously recited in claim 14.

REJECTION UNDER 35 U.S.C. § 103

In section 10 on pages 5-7, the Office Action rejects claims 1-4 and 8 under 35 U.S.C. § 103(a) as allegedly being unpatentable over U.S. Patent No. 6,976,071 to Donzis et al.

("Donzis") in view of U.S. Patent No. 7,212,492 to Au et al. ("Au"). Applicant respectfully traverses this rejection.

Claims 1 and 8 recite "creating . . . a path verification request message, wherein the message includes a basic type and a subtype that identify the message as a path verification request" (emphasis added). Support in the specification for the subject matter added to claims 1 and 8 can be found in, for example, sections [0025] and [0028].

Applicant respectfully submits that Donzis does not disclose, teach, or suggest this subject matter. The system of Donzis uses ping messages formatted according to the Internet Control Message Protocol (ICMP). See col. 5, ln. 1-19. "An ICMP echo message specifies the source address (the address of the node sending the echo message) and the destination address (the address of the target node)." Id. Donzis does not, however, disclose, teach, or suggest that these messages include a basic type and a subtype identifying the message as a path verification request.

Applicant respectfully submits that Au also does not disclose, teach, or suggest this subject matter. As shown in FIG. 3 of Au, "At step 312, control/management packets may be distinguished from Ethernet data packets based on a type parameter in the Ethernet packets." Thus, the system of Au determines when a management packet is received by examining a type parameter. Au does not, however, disclose, teach, or suggest that the packets include a subtype that identifies a message as a path verification request.

Accordingly, Applicant respectfully submits that Donzis and Au fail to disclose, teach, or suggest "creating . . . a path verification request message, wherein the message includes a basic

type and a subtype that identify the message as a path verification request," as recited in claims 1 and 8.

Applicant respectfully submits that claims 2-4 are allowable based at least on their dependence from claim 1 for the reasons stated above in connection with claim 1. For at least the forgoing reasons, Applicant respectfully requests that the rejection of claims 1-4 and 8 under 35 U.S.C. § 103 be withdrawn.

In section 11 on pages 7-8, the Office Action rejects claims 5 and 6 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Donzis in view of Au and further in view of U.S. Patent No. 6,952,421 to Slater. Applicant respectfully traverses this rejection.

Applicant respectfully submits that claims 5 and 6 are allowable based at least on their dependence from claim 1 for the reasons stated above in connection with claim 1. Slater fails to overcome the deficiencies in Donzis and Au discussed above in connection with the rejection of claim 1. Accordingly, Applicant respectfully requests that the rejection of claims 5 and 6 under 35 U.S.C. § 103 be withdrawn.

In section 12 on page 8, the Office Action rejects claim 7 under 35 U.S.C. § 103(a) as allegedly being unpatentable over Donzis in view of Au and further in view of U.S. Patent No. 6,810,411 to Coughlin et al. ("Coughlin"). Applicant respectfully traverses this rejection.

Applicant respectfully submits that claim 7 is allowable based at least on its dependence from claim 1 for the reasons stated above in connection with claim 1. Coughlin fails to overcome the deficiencies in Donzis and Au discussed above in connection with the rejection of

claim 1. Accordingly, Applicant respectfully requests that the rejection of claim 7 under 35

U.S.C. § 103 be withdrawn.

In section 13 on pages 9-11, the Office Action rejects claims 9-13, 15, 16, and 18 under

35 U.S.C. § 103(a) as allegedly being unpatentable over Slater in view of U.S. Patent No.

5,926,463 to Ahearn et al. ("Ahearn"). Applicant respectfully traverses this rejection.

As discussed above, Applicant amends claim 9, from which claims 10-17 depend, to

incorporate the allowable subject matter previously recited in claim 14. As also discussed above,

Applicant amends claim 18 to incorporate the allowable subject matter previously recited in

claim 14. Accordingly, claims 9-18 now recite allowable subject matter.

For at least the forgoing reasons, Applicant respectfully requests that the rejection of

claims 9-13, 15, 16, and 18 under 35 U.S.C. § 103 be withdrawn.
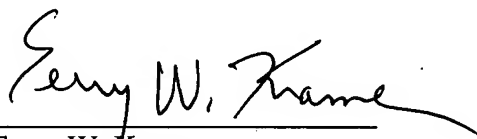

CONCLUSION

While we believe that the instant amendment places the application in condition for

allowance, should the Examiner have any further comments or suggestions, it is respectfully

requested that the Examiner telephone the undersigned attorney in order to expeditiously resolve

any outstanding issues.

In the event that the fees submitted prove to be insufficient in connection with the filing of this paper, please charge our Deposit Account Number 50-0578 and please credit any excess fees to such Deposit Account.

Respectfully submitted,
KRAMER & AMADO, P.C.

Date: ___December 4, 2007___

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APPENDIX A

The present invention provides an OAM tool that enables a network operator to verify the path that an Ethernet frame traverses through bridges in a bridged Ethernet LAN. Verification is performed using a mechanism to ping the path a frame will traverse. An Ethernet path verification message (Eping message) is sent in the data path, the message having a new EtherType that identifies it as a path verification message. The method verifies the data path that frames actually take, rather than determining the data path that frames should take as is done by prior art methods that utilize the control plane for path determination.

ANNOTATED SHEET

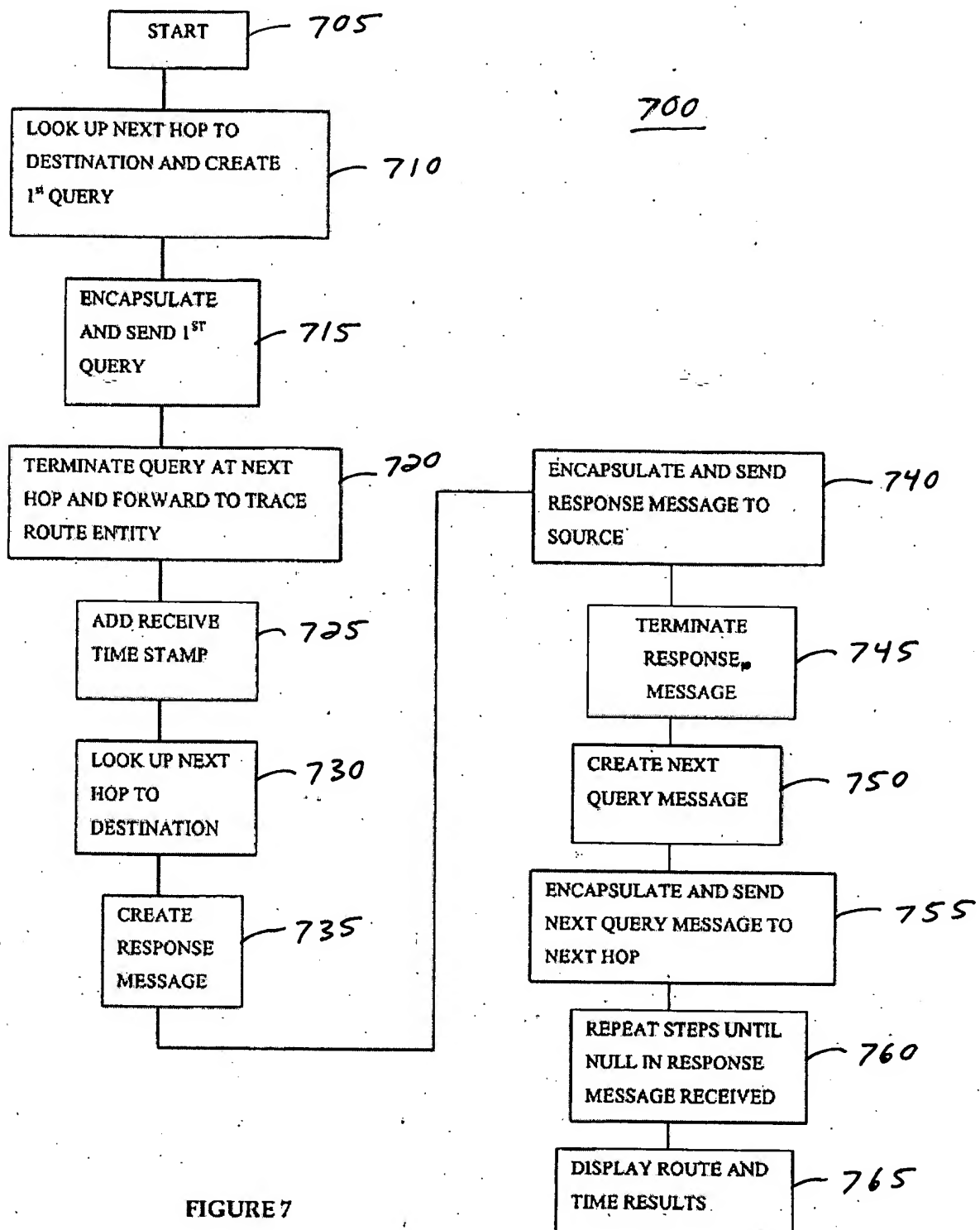START — 705

700

LOOK UP NEXT HOP TO DESTINATION AND CREATE 1ST QUERY — 710

ENCAPSULATE AND SEND 1ST QUERY — 715

TERMINATE QUERY AT NEXT HOP AND FORWARD TO TRACE ROUTE ENTITY — 720

ADD RECEIVE TIME STAMP — 725

LOOK UP NEXT HOP TO DESTINATION — 730

CREATE RESPONSE MESSAGE — 735

ENCAPSULATE AND SEND RESPONSE MESSAGE TO SOURCE — 740

TERMINATE RESPONSE MESSAGE — 745

CREATE NEXT QUERY MESSAGE — 750

ENCAPSULATE AND SEND NEXT QUERY MESSAGE TO NEXT HOP — 755

REPEAT STEPS UNTIL NULL IN RESPONSE MESSAGE RECEIVED — 760

DISPLAY ROUTE AND TIME RESULTS — 765

FIGURE 7